

WHAT IS CLAIMED IS:

1. A receiving apparatus comprising:

receiving means for receiving a broadcasting
signal in which information signals of a plurality of
5 programs are multiplexed;

information output means for outputting
information of an information signal received by said
receiving means;

selecting means for selecting an arbitrary program
10 from the plurality of programs; and

transmitting means for transmitting program
information of a program selected by said selecting
means to an external apparatus.

15 2. A receiving apparatus according to claim 1,
wherein the broadcasting signal is further multiplexed
with program attribute data of the plurality of
programs, and said transmitting means includes program
information generating means for generating the program
20 information by using the program attribute data of a
program selected by said selecting means.

3. A receiving apparatus according to claim 2,
further comprising program table generating means for
25 generating a program table by using the program
attribute data, and said selecting means selects an
arbitrary program from a plurality of programs

contained in the program list.

4. A receiving apparatus according to claim 1,
further comprising information inputting means for
5 inputting arbitrary comment information of a program
selected by said selecting means, and said transmitting
means includes program information generating means for
generating the program information by using the comment
information.

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5. A receiving apparatus according to claim 1,
wherein said selecting means searches the plurality of
programs in accordance with a predetermined retrieval
condition and selects a program in accordance with a
15 search result.

6. A receiving apparatus comprising:
receiving means for receiving a broadcasting
signal in which video signals and program information
20 signals of a plurality of programs are multiplexed;
video signal processing means for processing the
video signal of a program selected from the plurality
of programs and outputting the processed video signal
to a display device;
25 program information extracting means for
extracting program information from the broadcasting
signal received by said receiving means;

program table generating means for generating a
program table in accordance with the program
information extracted by said program information
extracting means and outputting data representative of
5 the program table to the display device;

selecting means for selecting an arbitrary
recommended program from programs described in the
program table;

file generating means for generating an output
10 file of the recommended program selected by said
selecting means by using the program information of the
recommended program among the program information
extracted by said program information extracting means;
and

15 transmitting means for transmitting the output
file of the recommended program generated by said file
generating means to an external apparatus.

7. A receiving apparatus according to claim 6,
20 wherein the output file of the recommended program
includes a plurality of information items, and said
file generating means generates an identification tag
of each of the plurality of information items.

25 8. A receiving apparatus according to claim 7,
wherein the information item includes information
representative of a recommendation index of each

program.

9. A receiving apparatus according to claim 7,
wherein the information item includes information
5 representative of a make-up person of the output file
of the recommended program.

10. A receiving apparatus according to claim 6,
wherein said transmitting means transmits the output
10 file of the recommended program to a network connected
to said receiving means.

11. A receiving apparatus comprising:
receiving means for receiving a broadcasting
15 signal in which video signals and program information
signals of a plurality of programs are multiplexed;
video signal processing means for processing the
video signal of a program selected from the plurality
of programs and outputting the processed video signal
20 to a display device;
program information extracting means for
extracting program information from the broadcasting
signal received by said receiving means;
program table generating means for generating a
25 program table in accordance with the program
information extracted by said program information
extracting means and outputting data representative of

the program table to the display device;

selecting means for searching the plurality of
programs in accordance with a predetermined retrieval
condition and selecting a recommended program in
5 accordance with a search result;

file generating means for generating an output
file of the recommended program selected by said
selecting means by using the program information of the
recommended program among the program information
10 extracted by said program information extracting means;
and

transmitting means for transmitting the output
file of the recommended program generated by said file
generating means to an external apparatus.

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12. A receiving apparatus comprising:

receiving means for receiving a broadcasting
signal in which information signals of a plurality of
programs are multiplexed;

20 program information input means for inputting
program information of a program selected from the
plurality of programs, from an external apparatus; and

program table generating means for generating a
program table in accordance with the program
25 information input to said program information input
means and outputting data representative of the program
table.

13. A receiving apparatus according to claim 12,
further comprising control means for judging from the
program information whether said receiving means can
receive the information signal of the selected program
5 and for controlling a generation process of the program
table by said program table generating means in
accordance with a judgement result.

14. A receiving apparatus according to claim 13,
10 wherein the program information includes time
information representative of a broadcasting time of
the selected program, and said control means controls
said program table generating means to inhibit a
display of a program judged that the broadcasting time
15 is incompatible.

15. A receiving apparatus according to claim 12,
wherein the program information includes service
information indicating a type of broadcasting service
20 of the selected program, and said control means
controls said program table generating means to inhibit
a display of a program of broadcasting service having a
different type of broadcasting service receivable by
the receiving apparatus.

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16. A receiving apparatus according to claim 13,
wherein the program information includes pay-per-view

information indicating the selected program is a pay-per-view program, and said control means performs a judgement process in accordance with the pay-per-view information.

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17. A receiving apparatus according to claim 13, wherein the program information includes audio-visual restriction information indicating audio-visual restriction of the selected program, and said control means performs a judgement process in accordance with the audio-visual restriction information.

18. A receiving apparatus according to claim 13, further comprising recording means for recording a received information signal, and said control means judges whether the information signal recorded in said recording means contains the information signal of the selected program, and controls a generation process of the program table.

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19. A receiving apparatus according to claim 12, wherein said program information input means inputs a plurality of program information sets, and said program table generating means generates the program table containing only programs of a selected program information set among the plurality of program information sets.

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20. A receiving apparatus according to claim 12,
wherein said program table generating means generates a
two-dimensional program table having a broadcasting
time as one axis and a channel as the other axis.

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21. A receiving apparatus according to claim 20,
wherein said program table generating means generates
the two-dimensional program table in which only the
program information of the selected program is
10 displayed in a corresponding area of the program table
and the program information of other programs is
inhibited to be displayed in other areas.

22. A receiving apparatus according to claim 20,
15 wherein in the broadcasting signal, program attribute
data of the plurality of programs is further
multiplexed, and said program table generating means
generates the program by using the program attribute
data.

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23. A receiving apparatus according to claim 20,
wherein said program table generating means generates
the program table in which a predetermined frame is
multiplexed with in a predetermined area of the
25 selected program.

24. A receiving apparatus according to claim 20,

wherein said program generating means generates the program table multiplexed with a predetermined mark image in a predetermined area of the selected program in the program table.

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25. A receiving apparatus according to claim 12, further comprising:

designating means for designating an arbitrary program from a plurality of programs contained in the program table; and

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signal processing means for processing the information signal of a program designated by said designating means, among the information signals received by said receiving means.

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26. A receiving apparatus comprising:

receiving means for receiving a broadcasting signal in which information signals of a plurality of programs are multiplexed;

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information output means for outputting information of the information signal received by said receiving means;

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retrieving means for retrieving a program from the plurality of programs in accordance with a predetermined condition;

program information input means for inputting program information of the program selected from a

plurality of programs, from an external apparatus; and
program table generating means for generating a
program table in accordance with a retrieval result by
said retrieving means and the program information input
5 to said program information input means and for
outputting program table data representative of the
program table.

27. An apparatus according to claim 26, wherein
10 said program table generating means generates a two-
dimensional program table having a broadcasting time as
one axis and a channel as the other axis.

28. A receiving apparatus according to claim 27,
15 wherein said program table generating means generates
the program table in which only the program information
of the selected program and the program information of
the program selected in accordance with the retrieval
result are displayed in corresponding areas of the
20 program table and the program information of other
programs is inhibited to be displayed in other areas.

29. A receiving apparatus according to claim 20,
wherein said program table generating means generates
25 the program table in which an area corresponding to the
selected program and the area of the program selected
in accordance with the retrieval result are displayed

at different brightness.

30. A receiving apparatus according to claim 27,
wherein said program table generating means generates
5 the program table in which only information of a
program coincident with a program which is selected
from the selected programs according to the retrieval
result is displayed in a corresponding area.

10 31. A receiving apparatus according to claim 27,
wherein in the broadcasting signal, program attribute
data of the plurality of programs is further
multiplexed, and said program table generating means
generates the program in which program information
15 generated by using the program attribute data of the
selected program among the program attribute data and
program information of the selected program are
displayed.

20 32. A television signal receiving apparatus,
comprising:
receiving means for receiving a television
broadcasting signal in which digital image signals of a
plurality of programs are multiplexed;
25 program information input means for inputting
program information of a program selected from the
plurality of programs, from an external apparatus;

program table generating means for generating a
program table in accordance with the program
information input to said program information inputting
means and displaying the program table on a display
5 device;

designating means for designating an arbitrary
program in the program table; and

image processing means for extracting a digital
image signal of the program designated by said
10 designating means from the television broadcasting
signal and displaying an image of the extracted program
on the display device.

33. A receiving method for a receiving apparatus
15 comprising the steps of:

receiving a broadcasting signal in which
information signals of a plurality of programs are
multiplexed;

outputting information of an information signal
20 received at said receiving step;

selecting an arbitrary program from the plurality
of programs; and

transmitting program information of a program
selected at said selecting step to an external
25 apparatus.

34. A receiving method for a receiving apparatus

comprising the steps of:

receiving a broadcasting signal in which video signals and program information signals of a plurality of programs are multiplexed;

5 processing the video signal of a program selected from the plurality of programs and outputting the processed video signal to a display device;

extracting program information from the broadcasting signal received at said receiving step;

10 generating a program table in accordance with the program information extracted at said program information extracting step and outputting data representative of the program table to the display device;

15 selecting an arbitrary recommended program from programs described in the program table;

generating an output file of the recommended program selected at said selecting step by using the program information of the recommended program among
20 the program information extracted at said program information extracting step; and

transmitting the output file of the recommended program generated at said file generating step to an external apparatus.

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35. A receiving method for a receiving apparatus comprising the steps of:

receiving a broadcasting signal in which video signals and program information signals of a plurality of programs are multiplexed;

5 processing the video signal of a program selected from the plurality of programs and outputting the processed video signal to a display device;

 extracting program information from the broadcasting signal received at said receiving step;

10 generating a program table in accordance with the program information extracted at said program information extracting means and outputting data representative of the program table to the display device;

15 searching the plurality of programs in accordance with a predetermined retrieval condition and selecting a recommended program in accordance with a search result;

20 generating an output file of the recommended program selected at said selecting step by using the program information of the recommended program among the program information extracted at said program information extracting step; and

25 transmitting the output file of the recommended program generated at said file generating step to an external apparatus.

36. A receiving method for a receiving apparatus

comprising the steps of:

receiving a broadcasting signal in which
information signals of a plurality of programs are
multiplexed;

5 inputting program information of a program
selected from the plurality of programs, from an
external apparatus; and

generating a program table in accordance with the
program information input at said program information
10 input step and outputting data representative of the
program table.

37. A receiving method for a receiving apparatus
comprising the steps of:

15 receiving a broadcasting signal in which
information signals of a plurality of programs are
multiplexed;

outputting information of the information signal
received at said receiving step;

20 retrieving a program from the plurality of
programs in accordance with a predetermined condition;

inputting program information of the program
selected from a plurality of programs, from an external
apparatus; and

25 generating a program table in accordance with a
retrieval result at said retrieving step and the
program information input at said program information

input step and for outputting program table data
representative of the program table.

38. A television signal receiving method for a
5 television signal receiving apparatus, comprising the
steps of:

receiving a television broadcasting signal in
which digital image signals of a plurality of programs
are multiplexed;

10 inputting program information of a program
selected from the plurality of programs, from an
external apparatus;

generating a program table in accordance with the
program information input at said program information
15 inputting step and displaying the program table on a
display device;

designating an arbitrary program in the program
table; and

20 extracting a digital image signal of the program
designated at said designating step from the television
broadcasting signal and displaying an image of the
extracted program on the display device.

39. A recording medium storing a program of a
25 receiving method for a receiving apparatus, said
receiving method comprising the steps of:

receiving a broadcasting signal in which

information signals of a plurality of programs are multiplexed;

outputting information of an information signal received at said receiving step;

5 selecting an arbitrary program from the plurality of programs; and

transmitting program information of a program selected at said selecting step to an external apparatus.

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40. A recording medium storing a program of a receiving method for a receiving apparatus, said receiving method comprising the steps of:

receiving a broadcasting signal in which video
15 signals and program information signals of a plurality of programs are multiplexed;

processing the video signal of a program selected from the plurality of programs and outputting the processed video signal to a display device;

20 extracting program information from the broadcasting signal received at said receiving step;

generating a program table in accordance with the program information extracted at said program information extracting step and outputting data
25 representative of the program table to the display device;

selecting an arbitrary recommended program from

programs described in the program table;

generating an output file of the recommended
program selected at said selecting step by using the
program information of the recommended program among
5 the program information extracted at said program
information extracting step; and

transmitting the output file of the recommended
program generated at said file generating step to an
external apparatus.

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41. A recording medium storing a program of a
receiving method for a receiving apparatus, said
receiving method comprising the steps of:

receiving a broadcasting signal in which video
15 signals and program information signals of a plurality
of programs are multiplexed;

processing the video signal of a program selected
from the plurality of programs and outputting the
processed video signal to a display device;

20 extracting program information from the
broadcasting signal received at said receiving step;

generating a program table in accordance with the
program information extracted at said program
information extracting means and outputting data
25 representative of the program table to the display
device;

searching the plurality of programs in accordance

with a predetermined retrieval condition and selecting
a recommended program in accordance with a search
result;

generating an output file of the recommended
5 program selected at said selecting step by using the
program information of the recommended program among
the program information extracted at said program
information extracting step; and

transmitting the output file of the recommended
10 program generated at said file generating step to an
external apparatus.

42. A recording medium storing a program of a
receiving method for a receiving apparatus, said
15 receiving method comprising the steps of:

receiving a broadcasting signal in which
information signals of a plurality of programs are
multiplexed;

inputting program information of a program
20 selected from the plurality of programs, from an
external apparatus; and

generating a program table in accordance with the
program information input at said program information
input step and outputting data representative of the
25 program table.

43. A recording medium storing a program of a

receiving method for a receiving apparatus, said
receiving method comprising the steps of:

receiving a broadcasting signal in which
information signals of a plurality of programs are
5 multiplexed;

outputting information of the information signal
received at said receiving step;

retrieving a program from the plurality of
programs in accordance with a predetermined condition;

10 inputting program information of the program
selected from a plurality of programs, from an external
apparatus; and

generating a program table in accordance with a
retrieval result at said retrieving step and the
15 program information input at said program information
input step and for outputting program table data
representative of the program table.

44. A recording medium storing a program of a
20 television signal receiving method for a television
signal receiving apparatus, said television signal
receiving method comprising the steps of:

receiving a television broadcasting signal in
which digital image signals of a plurality of programs
25 are multiplexed;

inputting program information of a program
selected from the plurality of programs, from an

external apparatus;

generating a program table in accordance with the
program information input at said program information
inputting step and displaying the program table on a
5 display device;

designating an arbitrary program in the program
table; and

extracting a digital image signal of the program
designated at said designating step from the television
10 broadcasting signal and displaying an image of the
extracted program on the display device.